

IN THE SPECIFICATION

1. Please amend paragraph [0004] as follows:

[0004] The ADSL supports both a high-speed data service and a standard voice service through a twisted pair copper line. The ADSL is advantageous in that it is currently widespread and supports a high downstream rate of up to 7 megabits per second (Mbps). However, the ADSL is disadvantageous in that its upstream rate is limited to a maximum of 800 kilobits per second (Kbps).

2. Please amend paragraph [0020] as follows:

[0020] To achieve these and other objects in accordance with the principles of the present invention, as embodied and broadly described, the present invention provides a method, comprising: providing high speed data services and voice services in a transmission system employing two binary, one quaternary modulation/demodulation, ~~said the~~ transmission system including a remote terminal providing a high-speed data service, a plurality of user terminals including data service terminals and voice service terminals, and a multirate digital subscriber line terminal connected to ~~said the~~ remote terminal through a twisted pair line, ~~said the~~ multirate digital subscriber line terminal being connected to ~~said the~~ user terminals, ~~said the~~ voice services including upstream and downstream voice services; during ~~said~~ downstream voice service, assembling, in ~~said the~~ remote terminal, a first high bit rate digital subscriber line frame by including signaling signals for ~~said the~~ voice service and signal

processing mode information in a user-defined interval of ~~said the~~ first high bit rate digital subscriber line frame, and transmitting ~~said the~~ assembled first high bit rate digital subscriber line frame to ~~said the~~ multirate digital subscriber line terminal through ~~said the~~ twisted pair line; and during ~~said the~~ upstream voice service, receiving, in ~~said the~~ remote terminal, a second high bit rate digital subscriber line frame and transmitting signaling signals in ~~said the~~ received second high bit rate digital subscriber line frame to an exchange.

3. Please amend paragraph [0021] as follows:

[0021] To achieve these and other objects in accordance with the principles of the present invention, as embodied and broadly described, the present invention provides a method, comprising: forming a transmission system providing high speed data services and voice services, ~~said the~~ transmission system including a multirate digital subscriber line terminal, a plurality of data terminals and voice terminals, and a remote terminal providing ~~said the~~ high speed data services, ~~said the~~ voice terminals including a first voice terminal; receiving a first high bit rate digital subscriber line frame ~~in said via the~~ multirate digital subscriber line terminal during a downstream voice service, ~~said the~~ first high bit rate digital subscriber line frame being assembled to include signaling signals for ~~said the~~ voice service and signal processing mode information in a user-defined interval of ~~said the~~ first high bit rate digital subscriber line frame, ~~said~~. ~~The~~ first high bit rate digital subscriber line frame being assembled by ~~said the~~ remote terminal; coupling ~~said the~~ signaling signals to ~~said the~~ first voice terminal; when a voice service response and request is received from ~~said the~~ first

voice terminal, assembling a second high bit rate digital subscriber line frame by including signaling signals for said voice service and signal processing mode information in a user-defined interval of ~~said~~ the second high bit rate digital subscriber line frame; and transmitting ~~said~~ the second high bit rate digital subscriber line frame.

4. Please amend paragraph [0022] as follows:

[0022] To achieve these and other objects in accordance with the principles of the present invention, as embodied and broadly described, the present invention provides an apparatus, comprising: a transmission system employing two binary, one quaternary modulation/demodulation and providing high speed data services and voice services, ~~said~~ the transmission system comprising: a remote terminal providing a high-speed data service; a plurality of user terminals including data service terminals and voice service terminals; a multirate digital subscriber line terminal being connected to ~~said~~ the remote terminal through a twisted pair line, and being connected to ~~said~~ the user terminals; when ~~said~~ the voice services correspond to a downstream voice service, ~~said~~ the remote terminal assembling a first high bit rate digital subscriber line frame by including signaling signals for ~~said~~ the downstream voice service and signal processing mode information in a user-defined interval of ~~said~~ the first high bit rate digital subscriber line frame, and ~~said~~ the remote terminal transmitting ~~said~~ the assembled first high bit rate digital subscriber line frame to ~~said~~ the multirate digital subscriber line terminal through ~~said~~ the twisted pair line; and when ~~said~~ the voice services correspond to an upstream voice service, ~~said~~ the remote terminal

receiving a second high bit rate digital subscriber line frame and transmitting signaling signals in ~~said~~ the received second high bit rate digital subscriber line frame to an exchange.